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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,598	07/26/2001	Takashi Sakai	1232-4743	6755
27123	7590	03/08/2005	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			LEE, CHEUKFAN	
			ART UNIT	PAPER NUMBER
			2622	

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/915,598	Applicant(s) TAKASHI SAKAI	
	Examiner Cheukfan Lee	Art Unit 2622	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 July 2001.  
2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/30/03</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. Claims 1-20 are pending. Claims 1, 7, 10, and 16 are independent.

2. The drawings are objected to because of the following:

Figs. 8-10 should be labeled with – PRIOR ART --. Please refer to page 8 and pages 2-4 of the specification.

3. Claims 5, 16, 19, and 20 are objected to because of the following:

Claim 5 should depend on claim 4, not claim 2.

Claim 16 is a method claim according to the preamble. However, the claim body is not written in form of step(s). A method claim body should be in form of step(s).

Claims 19 and 20 are objected to as being dependent upon the objected claim 16.

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 17 and 19 each recite "A control program for executing the image processing method ... by a computer". The claims are non-statutory. A statutory

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product with descriptive material must include a positive recitation of the computer readable medium. See M.P.E.P. 2106.

Claims 18 and 20 are rejected as being dependent upon rejected claims 17 and 19, respectively.

The following claim formats are acceptable and not subject to a 101 rejection:

1) "A computer program embodied in a computer readable medium for performing the steps of ..."

2) "A computer readable medium storing a program for performing the steps of ..."

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohzu et al. (U.S. Patent No. 5,771,070).

Regarding claim 1, Ohzu et al. discloses a solid state image pickup apparatus comprising a line sensor for photoelectric-converting light into a

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signals then accumulating the signal, and outputting the signal as a one-line electric signal (col. 9, line 25, col. 10, lines 35-41, and col. 12, lines 63-64), and a driving circuit (Fig. 4 for second embodiment) for driving the line sensor such that one line period is divided into a plurality of sections, including a section for optical information readout time section or light information readout time section, which reads on the claimed first section for reading valid image data, a dark voltage store time section, which reads on the claimed second section for storing dummy image data, and a light irradiation store time section, which reads on the claimed third section for storing valid image data (Fig. 4, col. 11, line 20 – col. 12, line 27).

Claim 10 is rejected as being corresponding to the rejected apparatus claim 1.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohzu et al. (U.S. Patent No. 5,771,070).

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Regarding claims 17 and 18, provided that the claims are rewritten (at least claim 17 is rewritten) to overcome the 101 rejection addressed above, although Ohzu et al. does not disclose a computer-readable storage medium for storing a program for performing the steps of the method discussed for claim 10, one of ordinary skill in the art would have recognize the benefit of implementing a computer program for the method steps of Ohzu et al. and storing it on a computer readable storage medium, which benefit is easy handling. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the program for the method steps of Ohzu et al. and store it on a computer readable storage medium for the purpose of easy handling.

10. Claims 2-6 and 11-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 7-9 are allowed.

12. Claim 16 would be allowable if rewritten or amended to overcome the objection set forth in this Office action.

13. The following is an examiner's statement of reasons for allowance:

Claim 2 would be allowable over Ohzu et al. because the drive circuit of Ohzu et al. does not set different accumulation periods for respective colors of a

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first line sensor and a second line sensor by setting different second sections (dummy image data storing sections) in the first line sensor and the second line sensor as claimed in claim 2. Ohzu et al. teaches a one-dimensional sensor (line sensor) in embodiments 1-3 and a two-dimensional sensor (area sensor) in other embodiments but does not teach the setting of different second sections (dummy data storing sections) for two line sensors.

Claim 3 would be allowable over Ohzu et al. because Ohzu et al. the drive circuit (see driving terminal in Fig. 4) reads the dummy image data (dark voltage) not during but outside the third section for storing valid image data (light irradiation store time section of Ohzu et al.).

Claim 4 and claim 5, if amended to depend on claim 4, would be allowable over Ohzu et al. because Ohzu et al. does not disclose that a transfer frequency for electric charge transfer in the first section (for reading valid image data) is different from those in the second and third sections. Different transfer frequencies between the sections are not discussed in Ohzu et al.

Claim 6 would be allowable because Ohzu et al. does not teach periodically reading out accumulated electric charge during the second section (dummy image data storing section). See Fig. 4.

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Claims 11-15 would be allowable for the reasons given for claims 2-6, respectively, for being method claims corresponding to claims 11-15, respectively.

Claim 7 and its dependent claims 8 and 9 are allowable over the prior art of record because none of the prior art teaches a drive circuit that sets accumulation periods for respective colors by changing timings of reading signals from a plurality of photoreception accumulation portions for the respective colors, in combination with other limitations of claim 7.

Claim 16 would be allowable over the prior art of record for the reason given for claim 7.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ohzu et al. (U.S. Patent No. 6,747,699) discloses a solid-state image pickup apparatus (Fig. 4).



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Nakamura et al. (U.S. Patent No. 6,507,365) discloses a solid state imaging device.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (703) 305-4867. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cheukfan Lee  
March 1, 2005



Cheukfan Lee